```
Title:
           US-10-049-967E-42 COPY 142 206
 Perfect score: 65
              1 RENEMDENLEQVSGIIGNLR.....SNKTRIDEANQRATKMLGSG
 Sequence:
 65
 RESULT 5
 AAW30103
 ID AAW30103 standard; peptide; 206 AA.
 XX
 AC AAW30103;
 XX
 DT 06-APR-1998 (first entry)
 XX
 DE Synaptosomal associated protein.
 XX
 KW Neurotransmitter secretion; inhibitor; neuronal cell; synaptic vesicle;
 KW excitation-secretory uncoupling peptide; catecholamine secretion;
      bovine chromaffin cell; Clostridium toxin; muscle spasticity reduction;
 KW synaptosomal associated protein; SNAP-25.
 XX
 OS Homo sapiens.
 XX
 PN WO9734620-A1.
 XX
 PD 25-SEP-1997.
 XX
 PF 18-MAR-1997; 97WO-US004393.
 XX
 PR 18-MAR-1996; 96US-0013599P.
· XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI Montal M;
 XX
 DR WPI; 1997-479986/44.
 XX
 PT Excitation-secretory uncoupling peptide(s) for inhibiting
 PT neuro:transmitter release - used particularly for treating muscle
 PT spasticity, and for delivering drugs specifically to neural cells.
 XX
 PS Disclosure; Page 27-28; 61pp; English.
 XX
 CC This sequence represents the human 25 kD synaptosomal associated protein
 CC (SNAP-25), which is an inhibitory agent of the invention. The agents of
 CC the invention inhibit secretion of neurotransmitter from neuronal cells
 CC and is an excitation-secretory uncoupling peptide (I) of at least 20
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CC amino acids (aa) all of which correspond substantially to any one of
CC AAW30097-W30102, or more generally any (I) that inhibits 50% of
CC catecholamine secretion from bovine chromaffin cells at a concentration
CC of 10 microM, especially 0.25 microM, or less. (I) are used, as a
CC replacement for Clostridium toxin, to inhibit release of
CC neurotransmitters from synaptic vesicles, specifically for reducing
CC muscle spasticity. Also (I) may be labelled to allow in vivo imaging of
CC intracellular distribution of (I). Compounds for delivering the drug to
CC neural cells provide targeted drug delivery, e.g. of substance P to brain
CC tumours for induction of apoptosis. Unlike the neurotoxins, (I) are not
CC toxic or immunogenic and are more readily available. Their therapeutic
CC effect lasts for several days or weeks, so lower doses or less frequent
CC treatments are required
XX
SO Sequence 206 AA;
                   100.0%; Score 65; DB 2; Length 206;
 Ouery Match
 Best Local Similarity 100.0%; Pred. No. 4.3e-59;
 Matches 65; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy
RENEMDENLEQVSGIIGNLRHMALDMGNEIDTQNRQIDRIMEKADSNKTRIDEA
NORATK 60
       Db
RENEMDENLEQVSGIIGNLRHMALDMGNEIDTQNRQIDRIMEKADSNKTRIDEA
NQRATK 201
       61 MLGSG 65
Qу
Db
       202 MLGSG 206
          US-10-049-967E-42
Title
Perfect score: 1052
Sequence:
            1
MAEDADMRNELEEMQRRADQ......SNKTRIDEANQRATKMLGSG 206
RESULT 7
AAW30103
ID AAW30103 standard; peptide; 206 AA.
XX
AC AAW30103;
XX
DT 06-APR-1998 (first entry)
```

```
XX
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KW excitation-secretory uncoupling peptide; catecholamine secretion;
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PI Montal M;
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DR WPI; 1997-479986/44.
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```

CC treatments are required XX

SQ Sequence 206 AA;

Query Match 95.4%; Score 1004; DB 2; Length 206; Best Local Similarity 95.6%; Pred. No. 4.1e-86; Matches 197; Conservative 5; Mismatches 4; Indels 0; Gaps 0;

Qy 1 MAEDADMRNELEEMQRRADQLADESLESTRRMLQLVEESKDAGIRTLVMLDEQ GEQLDRV 60

Db

MAEDADMRNELEEMQRRADQLADESLESTRRMLQLVEESKDAGIRTLVMLDEQ GEQLERI 60

Qy 61 EEGMNHINQDMKEAEKNLKDLGKCCGLFICPCNKLKSSDAYKKAWGNNQDGV VASQPARV 120

Db 6

EEGMDQINKDMKEAEKNLTDLGKFCGLCVCPCNKLKSSDAYKKAWGNNQDGV VASOPARV 120

Qy 121 VDEREQMAISGGFIRRVTNDARENEMDENLEQVSGIIGNLRHMALDMGNEIDTQ NROIDR 180

Db 121

 ${\tt VDEREQMAISGGFIRRVTNDARENEMDENLEQVSGIIGNLRHMALDMGNEIDTQ} \\ {\tt NRQIDR~180}$ 

Qy 181 IMEKADSNKTRIDEANQRATKMLGSG 206

Db 181 IMEKADSNKTRIDEANQRATKMLGSG 206